

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1-23 (canceled)

24. (New) A silicon-backed microdisplay structure comprising:
a silicon substrate;
a silicon-side conductive layer disposed directly on the silicon substrate;
a silicon-side passivation layer 2000-6000 angstroms thick disposed directly on the silicon-side conductive layer;
a cover glass sheet;
a glass-side conductive layer disposed directly on the cover glass sheet;
a glass-side passivation layer of a predetermined material and thickness disposed directly on the glass-side conductive layer; and
liquid crystal material sandwiched directly between the glass-side passivation layer and the silicon-side passivation layer;
wherein the glass-side passivation layer is 300-900 angstroms thick and comprises a material selected from the group consisting of CeO₂, In₂O₃, MgO, SnO₂, Ta₂O₅, TiO₂, Y₂O₃, SiO₂, ZnO, Al₂O₃, BeO, MgF₂ and combinations thereof,
such that the work function balance of said silicon-backed microdisplay is in the range of approximately 0.2eV to 0.4eV.
25. (New) A silicon-backed microdisplay as in claim 24, and wherein the silicon-side conductive layer comprises aluminum.
26. (New) A silicon-backed microdisplay as in claim 24, and wherein the silicon-side passivation layer comprises a silicon dioxide layer in combination with a silicon nitride layer.

27. (New) A silicon-backed microdisplay as in claim 24, and wherein the glass-side conductive layer comprises a material that includes Indium-tin oxide, has a characteristic resistance in the range of 100-500 ohms/square and a light transmissivity of 90% or greater.

28. (New) A silicon-backed microdisplay as in claim 24, and wherein the combination of the glass-side passivation layer and the glass-side conductive layer has an overall transmissivity of 90% or greater and a reflectivity of less than 1%.